Treasury Presentation to TBAC

Office of Debt Management



Fiscal Year 2019 Q3 Report

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Section I: Executive Summary

Highlights of Treasury's August 2019 Quarterly Refunding Presentation to the Treasury Borrowing Advisory Committee (TBAC)

Receipts and Outlays

- FY 2019 year-to-date receipts were \$68 billion (3%) higher than the comparable period last year. Total receipts were 16.4% of GDP, compared to 16.7% of GDP for the same period last year. Customs duties rose \$23 billion (78%), largely resulting from new tariffs. Withheld income and FICA taxes were up \$33 billion (2%), driven by growth in wages and employment. Gross excise taxes were \$11 billion (16%) higher due primarily to the return of the Health Insurance Providers tax in October 2018. Non-withheld income and SECA taxes were up \$7 billion (1%). Individual refunds were \$23 billion (9%) lower. Federal Reserve earnings were \$16 billion (28%) lower due to the Federal Reserve paying higher short-term interest rates to depository institutions. Gross corporate taxes were \$5 billion (2%) lower, due primarily to the lower corporate tax rates established by the Tax Cuts and Jobs Act (TCJA).
- After calendar adjustments, FY 2019 year-to-date outlays were \$205 billion (7%) higher than the comparable period last year. Total outlays were 21.1% of GDP, compared to 20.7% of GDP for the same period last year. Defense expenditures were up \$38 billion (8%) due to increased spending for military personnel, operations, maintenance, and procurement. Social Security Administration outlays were \$42 billion (5%) higher due to increases in enrollment, the average benefit, and a cost-of-living adjustment of 2.8%. Treasury outlays were \$43 billion (8%) higher due primarily to increased interest on the public debt. Health and Human Services spending was \$47 billion (5%) higher due to increased Medicare and Medicaid expenditures. Education expenditures were up \$40 billion (85%) due to differences in subsidy re-estimates through this period.

Projected Net Marketable Borrowing (FY 2019)

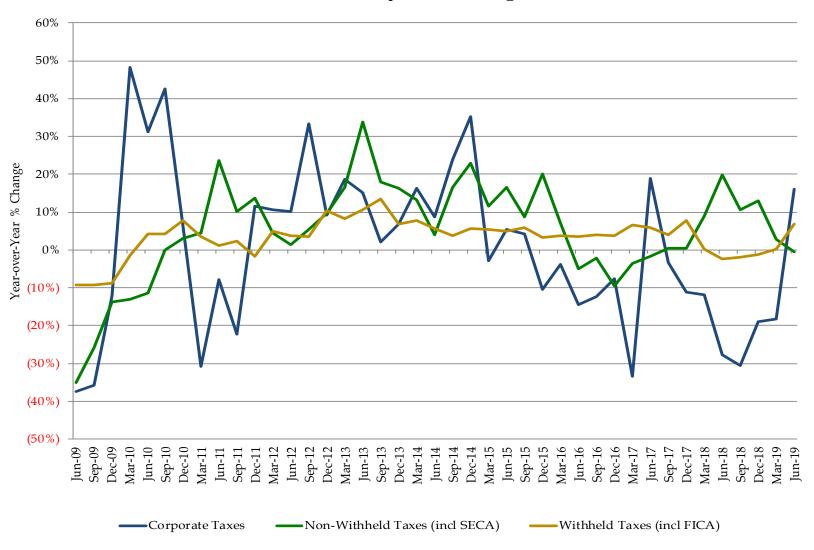
Based on the quarterly borrowing estimate, Treasury's Office of Fiscal Projections (OFP) currently forecasts a net privately-held
marketable borrowing need of \$433 billion for Q4 FY 2019, with an end-of-September cash balance of \$350 billion. Privately-held
marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve's System Open
Market Account (SOMA), but includes financing required due to SOMA redemptions.

Demand for Treasury Securities

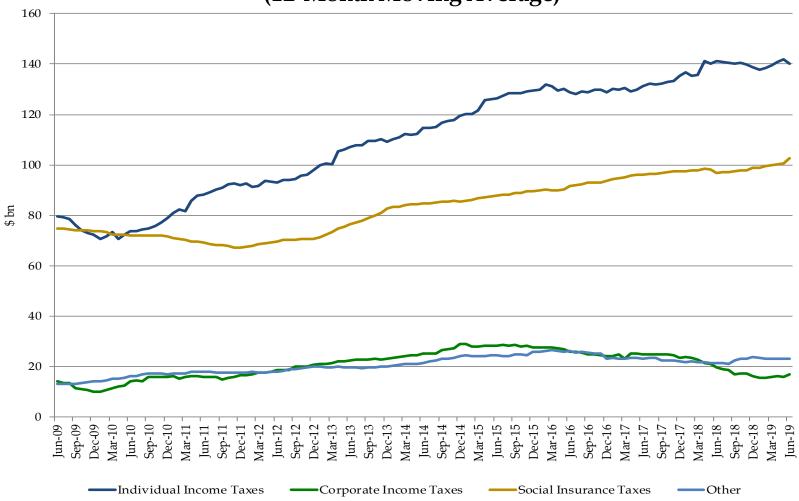
- Bid-to-cover ratios for all securities were largely stable over the last quarter.
- Foreign demand remained steady.

Section II: Fiscal

Quarterly Tax Receipts

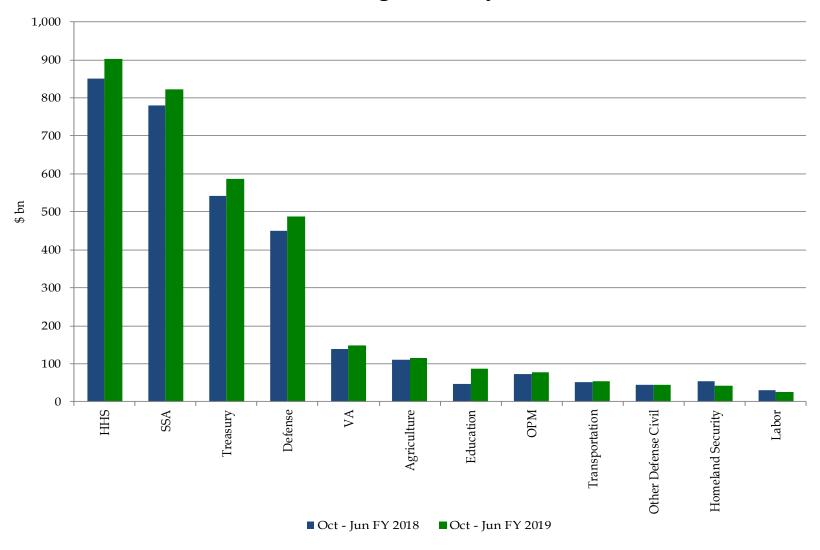


Monthly Receipt Levels (12-Month Moving Average)

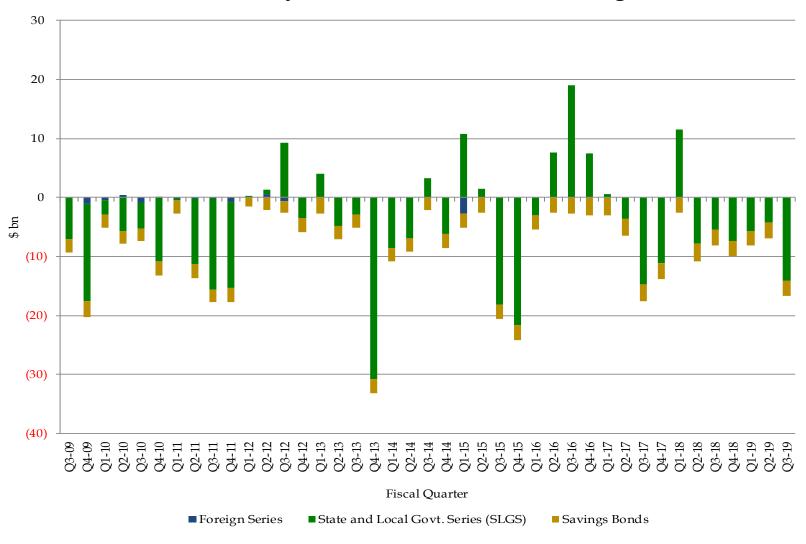


Individual Income Taxes include withheld and non-withheld. Social Insurance Taxes include FICA, SECA, RRTA, UTF deposits, FUTA and RUIA. Other includes excise taxes, estate and gift taxes, customs duties and miscellaneous receipts. Source: United States Department of the Treasury

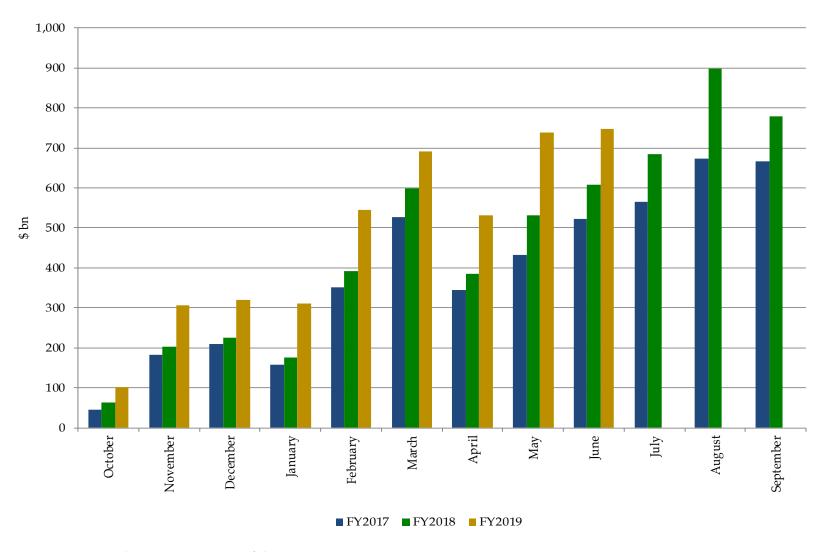
Largest Outlays



Treasury Net Nonmarketable Borrowing



Cumulative Budget Deficits by Fiscal Year



FY 2019-2021 Deficits and Net Marketable Borrowing Estimates*, in \$ billions

	Primary Dealers ¹	OFP ²	OMB^3	CBO ⁴
FY 2019 Deficit Estimate	950		1,001	896
FY 2020 Deficit Estimate	1,012		1,045	892
FY 2021 Deficit Estimate	1,100		1,015	962
FY 2019 Deficit Range	900-1,050			
FY 2020 Deficit Range	900-1,250			
FY 2021 Deficit Range	962-1,290			
FY 2019 Privately-Held Net Marketable Borrowing Estimate	1,004	1,273		
, and the second	•	1,273		
FY 2020 Privately-Held Net Marketable Borrowing Estimate	1,085			
FY 2021 Privately-Held Net Marketable Borrowing Estimate	1,140			
FY 2019 Privately-Held Net Marketable Borrowing Range	782-1,260			
FY 2020 Privately-Held Net Marketable Borrowing Range	850-1,406			
FY 2021 Privately-Held Net Marketable Borrowing Range	900-1,290			
FY 2019 SOMA Redemption Estimate	229	263		
FY 2020 SOMA Redemption Estimate				
FY 2021 SOMA Redemption Estimate				
FY 2019 Net Marketable Borrowing Estimate		1,010	1,070	871
FY 2020 Net Marketable Borrowing Estimate	1,085		1,112	955
FY 2021 Net Marketable Borrowing Estimate	1,140		1,082	1,013
Estimates as of:	Jul-19	Jul-19	Jul-19	May-19

1Based on primary dealer feedback in July 2019.

 $Estimates\ above\ are\ medians\ and\ assume\ an\ end-of-September\ 2019\ cash\ balance\ of\ \$165\ billion.$

2Treasury's Office of Fiscal Projections (OFP) borrowing estimates announced on July 29, 2019.

3Table S-11 of OMB's "A Budget for a Better America, Fiscal Year 2020, Mid-Session Review," July 2019.

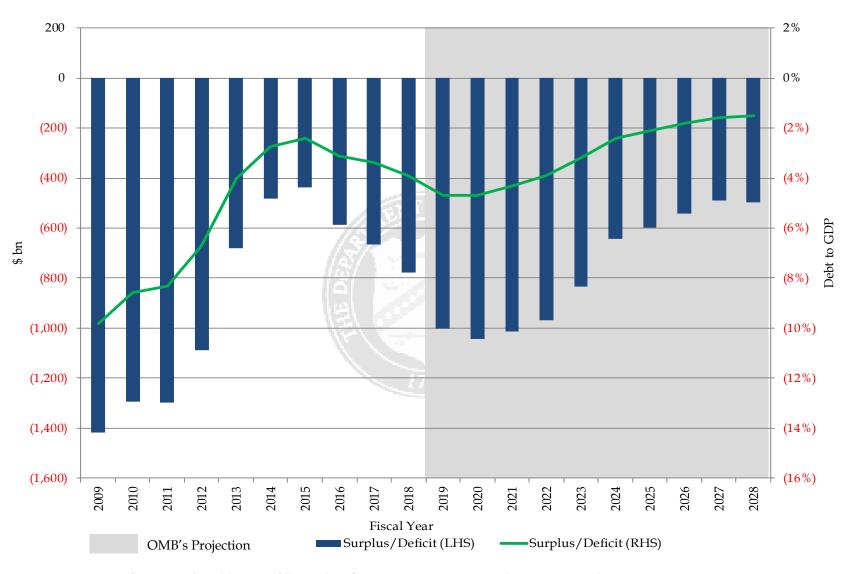
4Table 3 of CBO's "Updated Budget Projections: 2019 to 2029," May 2019 (current law).

5Table 2 of CBO's "An Analysis of the President's 2020 Budget," May 2019.

 ${\rm *Privately\text{-}held\ marketable\ borrowing\ \underline{excludes}\ rollovers\ (auction\ "add-ons")\ of\ Treasury\ securities\ held\ in\ the}$

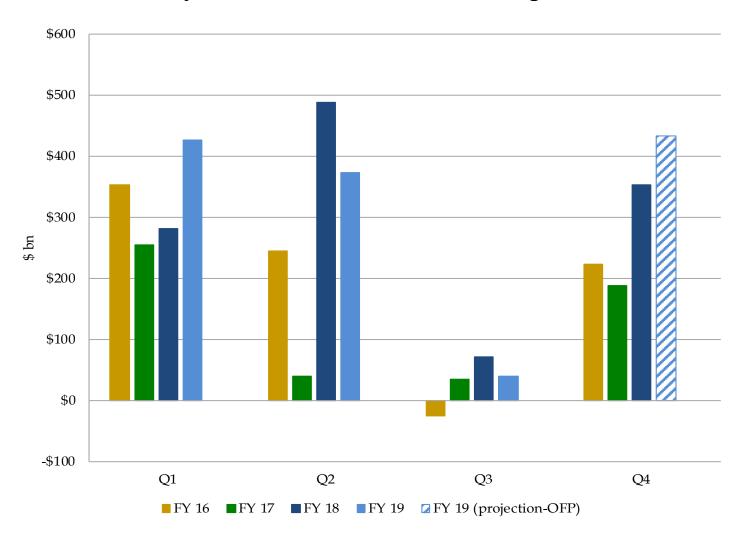
 $Federal\ Reserve's\ System\ Open\ Market\ Account\ (SOMA),\ but\ \underline{includes}\ financing\ required\ due\ to\ SOMA\ redemptions.$

Budget Surplus/Deficit



Projections are from OMB's Table S-11 of "A Budget for a Better America, Fiscal Year 2020, Mid-Session Review," July 2019.

Privately-Held Net Marketable Borrowing Outlook



Note: Privately-held marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve's System Open Market Account (SOMA), but includes financing required due to SOMA redemptions.

Section III: Financing

Assumptions for Financing Section (pages 16 to 21)

- Portfolio and SOMA holdings as of 06/30/2019.
- Estimates reflect a reduction in SOMA's monthly Treasury redemption cap from \$30 billion to \$15 billion beginning in May 2019 and an end date for SOMA capped redemptions at the end of September 2019, according to the FOMC's "Balance Sheet Normalization Principles and Plans" published on March 20, 2019.
- Estimates assume announced issuance sizes and patterns remain constant for nominal coupons, TIPS, and FRNs given changes made at the May 2019 refunding, while using a total of ~\$2.25 trillion of bills outstanding.
- The principal on the TIPS securities was accreted to each projection date based on market ZCIS levels as of 06/30/2019.
- No attempt was made to account for future financing needs.

Sources of Privately-Held Financing in FY19 Q3*

April - June 2019	
Net Bill Issuance	(229)
Net Coupon Issuance	269
Subtotal: Net Marketable Borrowing	40
Ending Cash Balance	264
Beginning Cash Balance	334
Subtotal: Change in Cash Balance	(70)
Net Implied Funding for FY19 Q3**	110

	A	April - June 201	9	Fiscal Year-to-Date			
		Bill Issuance			Bill Issuance		
Security	Gross	Maturing	Net	Gross	Maturing	Net	
4-Week	605	685	(80)	1,815	1,835	(20)	
8-Week	455	455	0	1,205	925	280	
13-Week	504	576	(72)	1,638	1,779	(141)	
26-Week	471	495	(24)	1,464	1,608	(144)	
52-Week	78	78	(0)	260	224	36	
CMBs	20	73	(53)	123	123	0	
Bill Subtotal	2,133	2,362	(229)	6,505	6,494	11	

	A	pril - June 201	9	Fis	scal Year-to-Da	ıte	
	C	oupon Issuand	e	Coupon Issuance			
Security	Gross	Maturing	Net	Gross	Maturing	Net	
2-Year FRN	56	41	15	167	123	44	
2-Year	120	52	68	354	208	146	
3-Year	114	72	42	339	216	123	
5-Year	123	99	24	363	256	107	
7-Year	96	59	37	286	197	89	
10-Year	75	31	44	224	83	141	
30-Year	51	0	51	152	9	143	
5-Year TIPS	32	54	(22)	46	54	(8)	
10-Year TIPS	11	0	11	46	15	31	
30-Year TIPS	0	0	0	13	0	13	
Coupon Subtotal	678	409	269	1,990	1,161	829	

^{*}Privately-held marketable borrowing <u>excludes</u> rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve's System Open Market Account (SOMA), but <u>includes</u> financing required due to SOMA redemptions.

^{**}An end-of-June 2019 cash balance of \$264 billion versus a beginning-of-April 2019 cash balance of \$334 billion. By keeping the cash balance constant, Treasury arrives at the net implied funding number.

Sources of Privately-Held Financing in FY19 Q4*

July - September 2019									
Assuming Constant Coupon Issuance Sizes**									
Treasury Announced Net Marketable Borrowing***	433								
Net Coupon Issuance	312								
Implied Change in Bills	121								

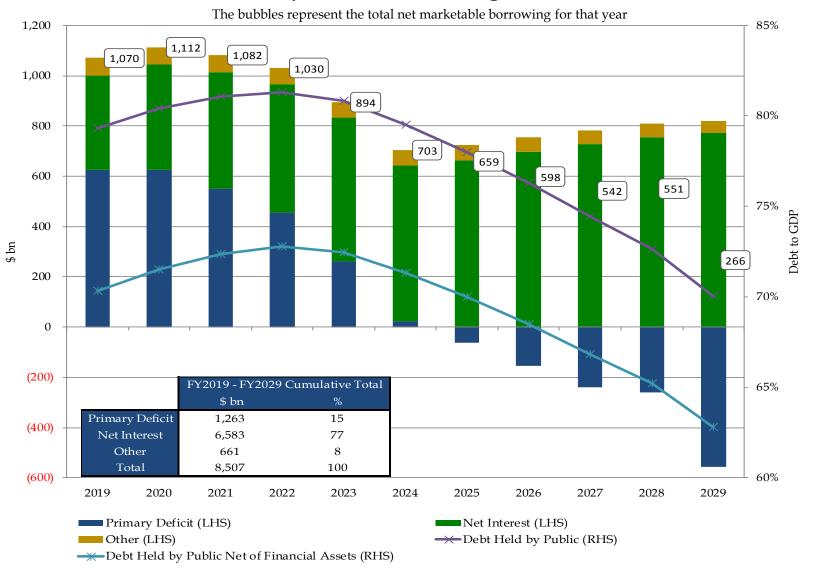
		- September 2 Coupon Issuanc		Fiscal Year-to-Date Coupon Issuance			
Security	Gross	Maturing	Net	Gross	Maturing	Net	
2-Year FRN	56	41	15	223	164	59	
2-Year	160	104	56	514	312	202	
3-Year	114	72	42	453	288	165	
5-Year	164	139	25	527	396	131	
7-Year	128	60	68	414	257	157	
10-Year	75	28	47	299	111	188	
30-Year	51	6	45	203	15	188	
5-Year TIPS	0	0	0	46	54	(8)	
10-Year TIPS	25	17	8	71	32	39	
30-Year TIPS	6	0	6	19	0	19	
Coupon Subtotal	779	467	312	2,769	1,628	1,141	

^{*}Privately-held marketable borrowing <u>excludes</u> rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve's System Open Market Account (SOMA), but <u>includes</u> financing required due to SOMA redemptions.

^{**}Keeping announced issuance sizes and patterns constant for nominal coupons, TIPS, and FRNs based on changes made at the May 2019 refunding.

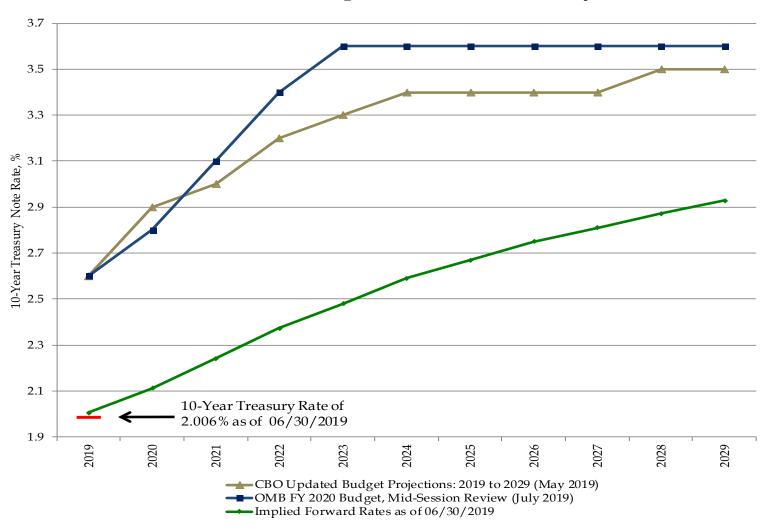
^{***}Assumes an end-of-September 2019 cash balance of \$350 billion versus a beginning-of-July 2019 cash balance of \$264 billion. Financing Estimates released by the Treasury can be found here: http://www.treasury.gov/resource-center/data-chart-center/quarterly-refunding/Pages/Latest.aspx

OMB's Projection of Borrowing from the Public



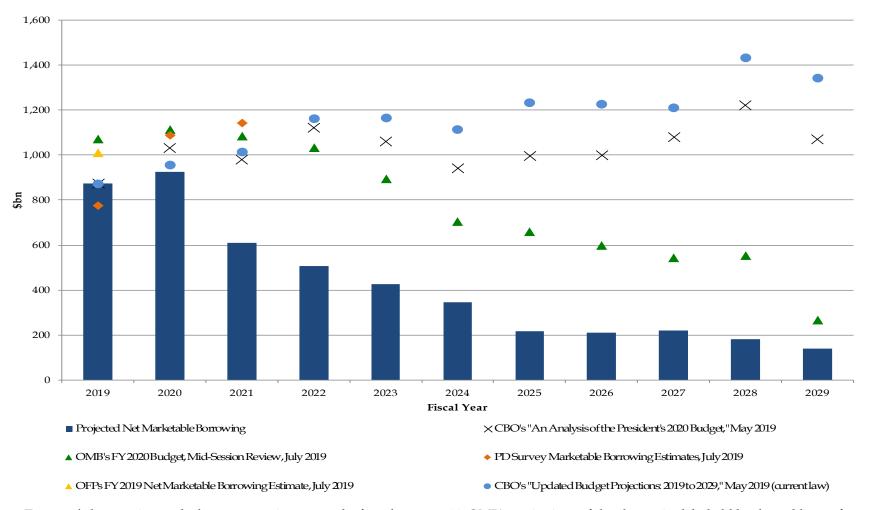
OMB's projections of the change in debt held by the public (borrowing) are from Table S-11 of "A Budget for a Better America, Fiscal Year 2020 Mid-Session Review," July 2019. "Other" represents borrowing from the public to provide direct and guaranteed loans.

Interest Rate Assumptions: 10-Year Treasury Note



OMB's economic assumption of the 10-Year Treasury note rates are from Table 3 of OMB's "A Budget for a Better America, Fiscal Year 2020, Mid-Session Review" July 2019. CBO's economic assumption of the 10-Year Treasury note rates are from Table 3 of CBO's "Updated Budget Projections: 2019 to 2029," May 2019. The forward rates are the implied 10-Year Treasury note rates on June 30, 2019.

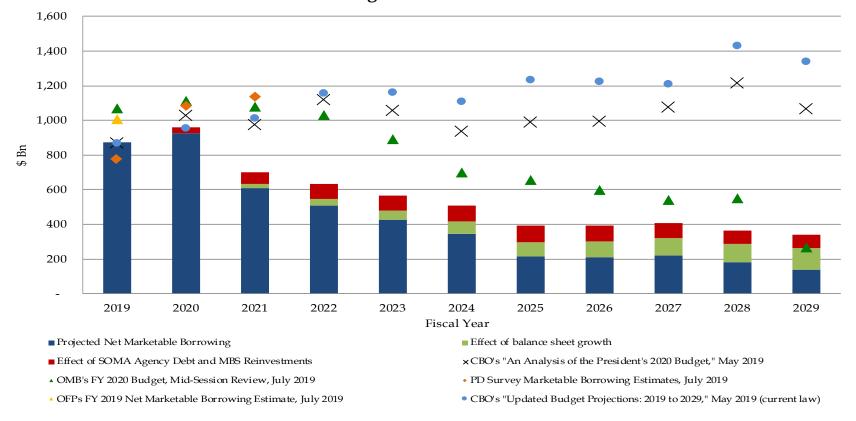
Projected Net Marketable Borrowing Assuming Future Issuance Remains Constant*



Treasury's latest primary dealer survey estimates can be found on page 11. OMB's projections of the change in debt held by the public are from Table S-11 of "A Budget for a Better America, Fiscal Year 2020, Mid-Session Review," July 2019. CBO's current law budget projections of the change in debt held by the public are from Table 3 of "Updated Budget Projections: 2019 to 2029," May 2019. CBO's budget projections of the change in debt held by the public are from Table 2 of "An Analysis of the President's 2020 Budget," May 2019. See table in the appendix section for details.

^{*} Projections reflect a reduction in SOMA's monthly Treasury redemption cap from \$30 billion to \$15 billion beginning in May 2019 and an end date for SOMA capped redemptions at the end of September 2019, according to the FOMC's "Balance Sheet Normalization Principles and Plans" published on March 20, 2019.

Estimate of the Effect of SOMA Purchases on Projected Net Borrowing Assuming SOMA Agency Debt and Mortgage Reinvestments Match Treasury Securities Outstanding and Future Issuance Remains Constant*



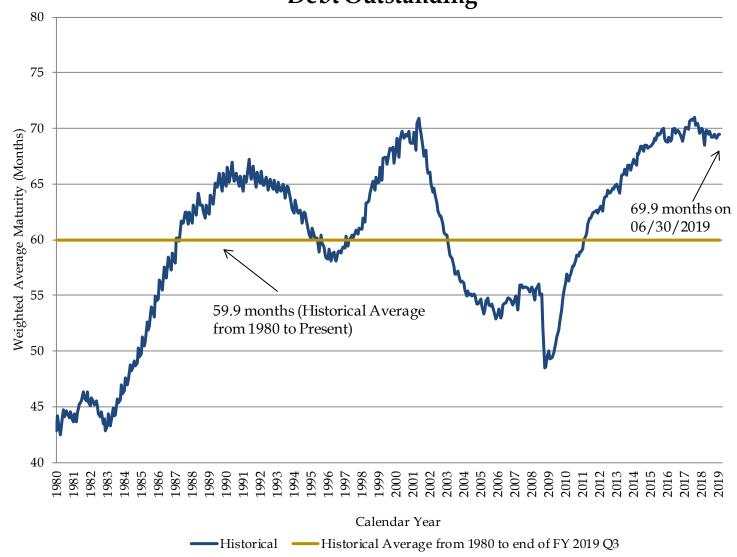
Treasury's latest primary dealer survey estimates can be found on page 11. OMB's projections of the change in debt held by the public are from Table S-11 of "A Budget for a Better America, Fiscal Year 2020, Mid-Session Review," July 2019. CBO's current law budget projections of the change in debt held by the public are from Table 3 of "Updated Budget Projections: 2019 to 2029," May 2019. CBO's budget projections of the change in debt held by the public are from Table 2 of "An Analysis of the President's 2020 Budget," May 2019.

*Projections reflect a reduction in SOMA's monthly Treasury redemption cap from \$30 billion to \$15 billion during May-September 2019, after which redemptions will end. Projections also reflect that principal payments received from agency debt and MBS will be reinvested into Treasury securities subject to a cap of \$20 billion beginning in October 2019, according to the FOMC's "Balance Sheet Normalization Principles and Plans" published on March 20, 2019. Projections assume a prepayment of the most recent realized 3M CPR. Secondary market purchases of Treasury securities reflect Fed's guidelines for Treasury reinvestments purchases released in May 2019 at the following link: https://www.newyorkfed.org/markets/treasury-reinvestments-purchases-faq.html. These purchases increase marketable borrowing when they mature and are rolled over at Treasury auctions as addons. Projections also assume a 6% annual rate of balance sheet growth based on historical averages and the expectation that the Fed will increase its balance sheet beginning in 3Q CY2020 (based on Fed's March survey of primary dealers at the following link

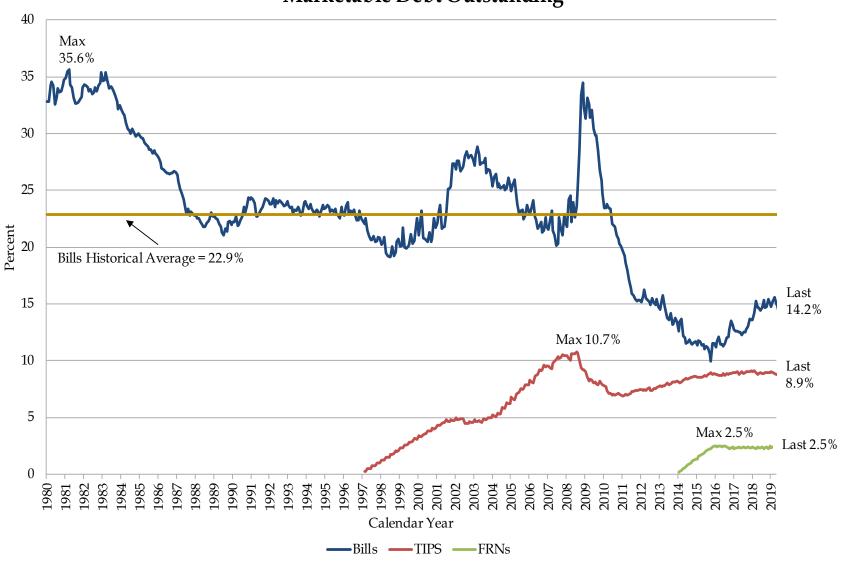
https://www.newyorkfed.org/markets/primarydealer_survey_questions).

Section IV: Portfolio Metrics

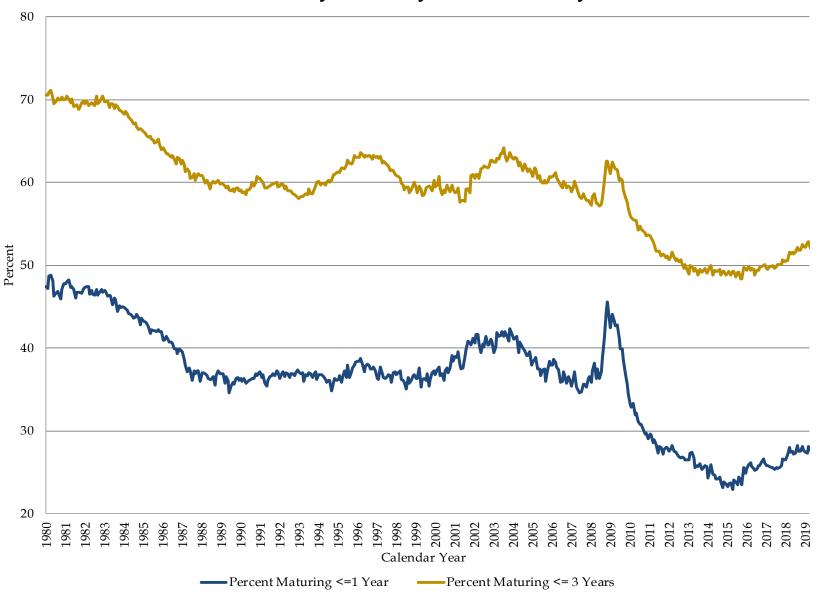
Historical Weighted Average Maturity of Marketable Debt Outstanding



Bills, TIPS & FRNs Outstanding as a Percent of Marketable Debt Outstanding



Treasury Maturity Profile History



End of Fiscal Year & Most Recent Quarter Maturity Profile, \$ billions

Date	(0,1]	(1,2]	(2,3]	(3,5]	(5,7]	(7,10]	(10,30]	Total	(0,5]
Sep-11	2,620	1,334	980	1,541	1,070	1,053	1,017	9,616	6,476
Sep-12	2,951	1,373	1,104	1,811	1,214	1,108	1,181	10,742	7,239
Sep-13	2,939	1,523	1,242	1,965	1,454	1,136	1,331	11,590	7,669
Sep-14	2,935	1,739	1,319	2,207	1,440	1,113	1,528	12,281	8,199
Sep-15	3,097	1,775	1,335	2,382	1,478	1,121	1,654	12,841	8,589
Sep-16	3,423	1,828	1,538	2,406	1,501	1,151	1,800	13,648	9,195
Sep-17	3,631	2,027	1,504	2,433	1,466	1,180	1,946	14,188	9,596
Sep-18	4,299	2,076	1,603	2,472	1,531	1,209	2,077	15,268	10,450
Jun-19	4,397	2,244	1,726	2,479	1,592	1,292	2,192	15,922	10,846

End of Fiscal Year & Most Recent Quarter Maturity Profile, percent

Date	(0,1]	(1,2]	(2,3]	(3,5]	(5,7]	(7,10]	(10,30]	(0,3]	(0,5]
Sep-11	27.2	13.9	10.2	16.0	11.1	10.9	10.6	51.3	67.3
Sep-12	27.5	12.8	10.3	16.9	11.3	10.3	11.0	50.5	67.4
Sep-13	25.4	13.1	10.7	17.0	12.5	9.8	11.5	49.2	66.2
Sep-14	23.9	14.2	10.7	18.0	11.7	9.1	12.4	48.8	66.8
Sep-15	24.1	13.8	10.4	18.5	11.5	8.7	12.9	48.3	66.9
Sep-16	25.1	13.4	11.3	17.6	11.0	8.4	13.2	49.7	67.4
Sep-17	25.6	14.3	10.6	17.1	10.3	8.3	13.7	50.5	67.6
Sep-18	28.2	13.6	10.5	16.2	10.0	7.9	13.6	52.3	68.4
Jun-19	27.6	14.1	10.8	15.6	10.0	8.1	13.8	52.6	68.1

Section V: Demand

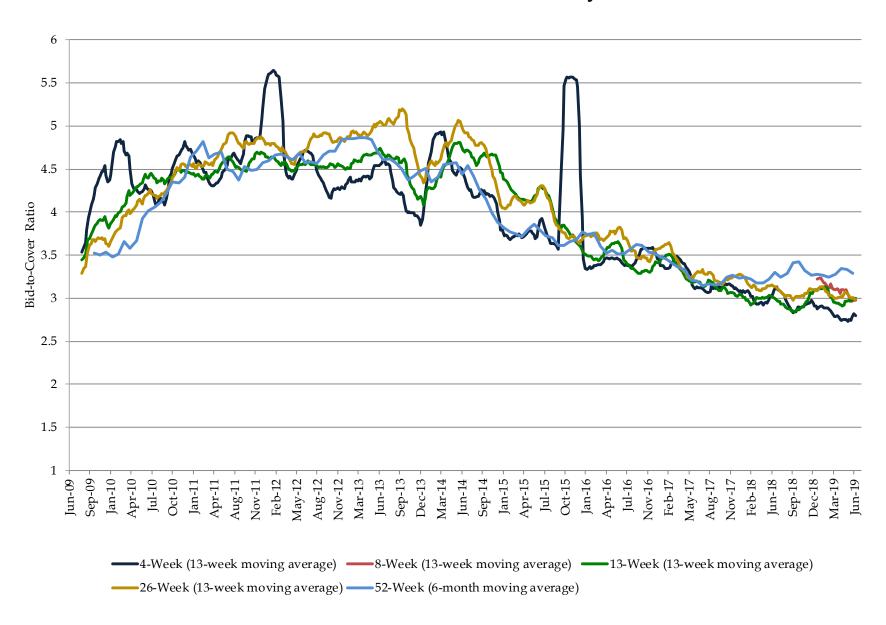
Summary Statistics for Fiscal Year 2019 Q3 Auctions

Security Type	Term	Stop Out Rate (%)*	Bid-to- Cover Ratio*	Competitive Awards (\$bn)	% Primary Dealer*	% Direct*	% Indirect*	Non- Competitive Awards (\$bn)	SOMA "Add- Ons" (\$bn)	10-Year Equivalent (\$bn)**
Bill	4-Week	2.327	2.8	575.0	57.8	2.6	39.7	20.0	0.0	5.2
Bill	8-Week	2.310	3.0	451.5	59.6	3.1	37.3	3.5	0.0	7.9
Bill	13-Week	2.320	3.0	488.4	52.3	4.0	43.7	15.6	0.0	14.3
Bill	26-Week	2.301	3.0	457.2	53.6	5.7	40.7	13.8	0.0	26.6
Bill	52-Week	2.208	3.1	76.4	45.1	2.3	52.6	1.6	0.0	8.8
Bill	CMB	2.385	3.3	20.0	64.4	4.9	30.7	0.0	0.0	0.2
Coupon	2-Year	2.058	2.6	118.9	30.0	22.4	47.6	1.1	7.0	28.4
Coupon	3-Year	2.137	2.5	113.5	36.9	17.4	45.7	0.5	13.0	42.5
Coupon	5-Year	2.057	2.4	122.9	23.5	17.8	58.7	0.1	7.2	70.6
Coupon	7-Year	2.153	2.4	95.9	23.8	18.2	58.0	0.1	5.6	75.4
Coupon	10-Year	2.363	2.4	75.0	25.6	12.3	62.0	0.0	9.2	85.5
Coupon	30-Year	2.815	2.3	51.0	26.1	13.4	60.6	0.0	6.5	132.9
TIPS	5-Year	0.345	2.5	31.9	14.7	9.8	75.6	0.1	0.2	17.9
TIPS	10-Year	0.567	3.1	11.0	13.9	29.1	57.0	0.0	1.2	12.7
FRN	2-Year	0.162	3.0	56.0	50.0	1.5	48.5	0.0	2.1	0.0
	Total Bills	2.312	2.9	2,068.6	55.5	3.7	40.7	54.4	0.0	62.9
	Total Coupons		2.5	577.2	28.0	17.6	54.4	1.9	48.4	435.2
Total TIPS		0.402	2.7	42.9	14.5	14.7	70.8	0.1	1.4	30.6
	Total FRN	0.162	3.0	56.0	50.0	1.5	48.5	0.0	2.1	0.0

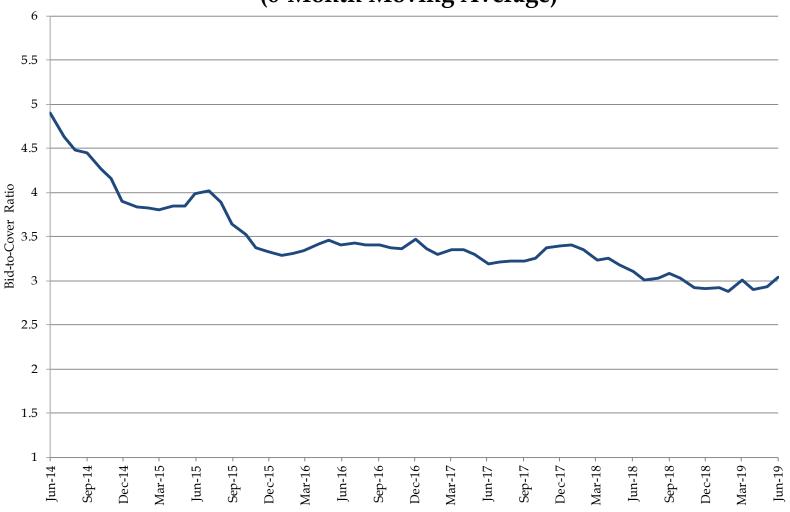
^{*}Weighted averages of Competitive Awards. FRNs are reported on discount margin basis.

^{**}Approximated using prices at settlement and includes both Competitive and Non-Competitive Awards. For TIPS 10-year equivalent, a constant auction BEI is used as the inflation assumption.

Bid-to-Cover Ratios for Treasury Bills



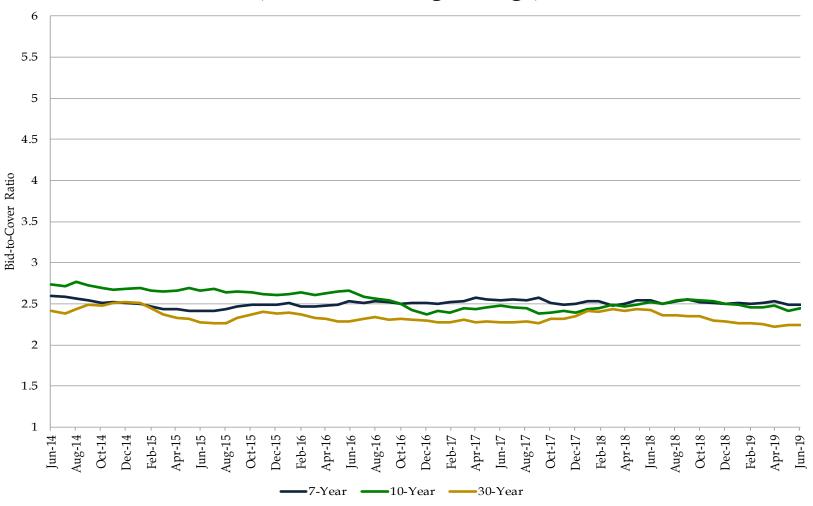
Bid-to-Cover Ratios for FRNs (6-Month Moving Average)



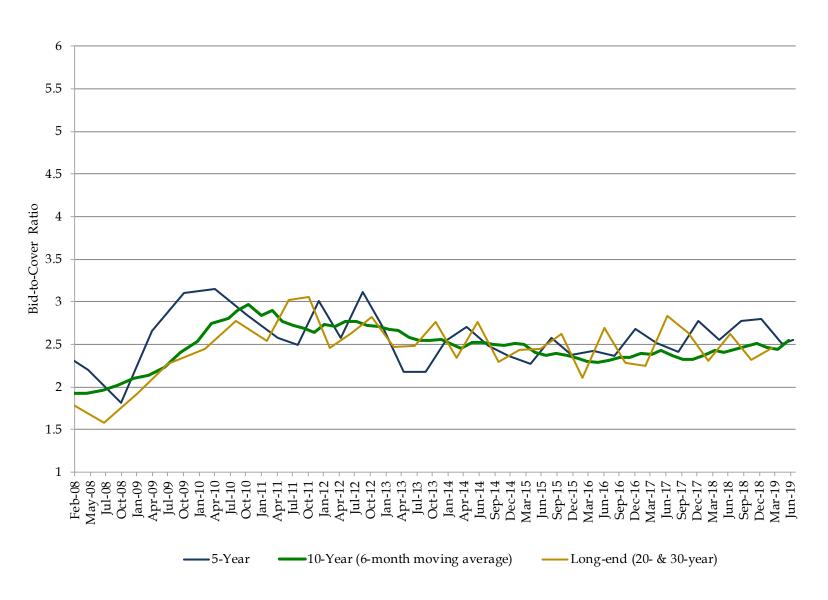
Bid-to-Cover Ratios for 2-, 3-, and 5-Year Nominal Securities (6-Month Moving Average)



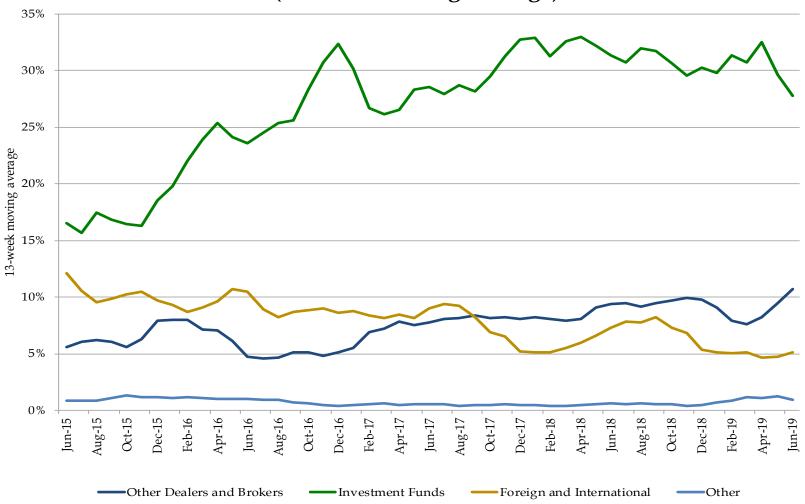
Bid-to-Cover Ratios for 7-, 10-, and 30-Year Nominal Securities (6-Month Moving Average)



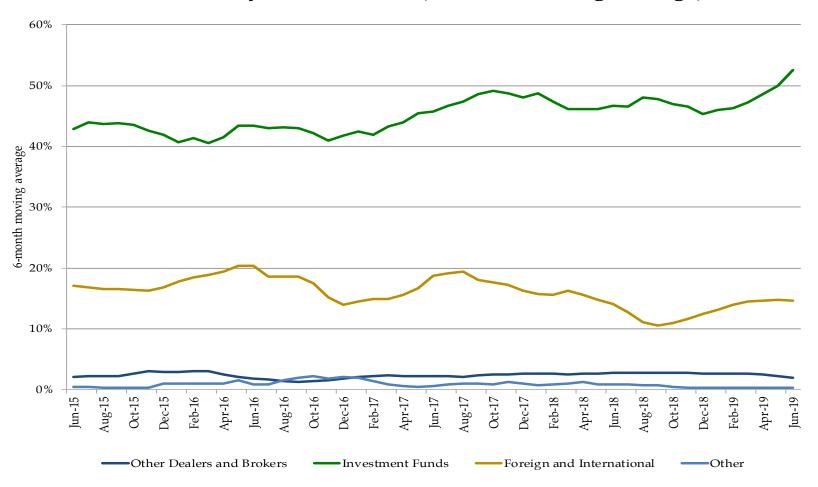
Bid-to-Cover Ratios for TIPS



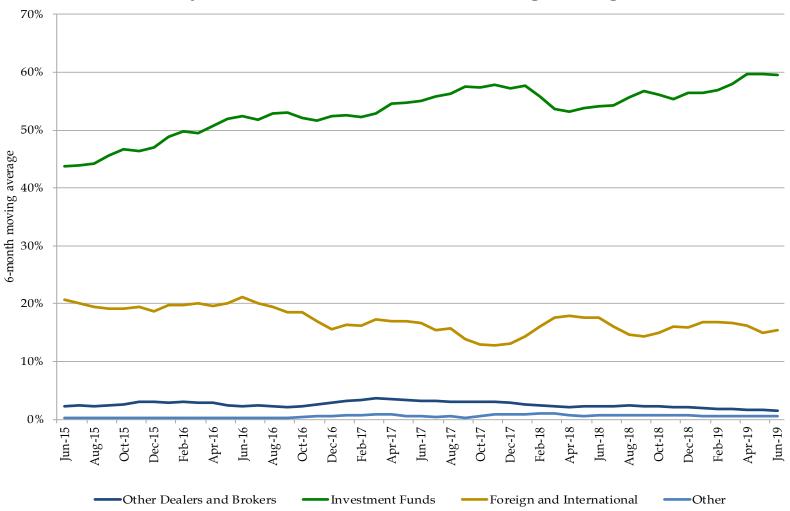
Percent Awarded in Bill Auctions by Investor Class (13-Week Moving Average)



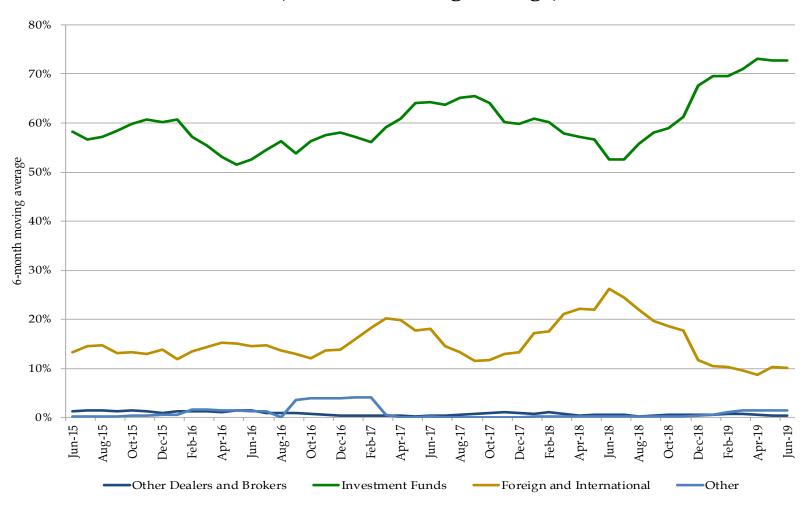
Percent Awarded in 2-, 3-, and 5-Year Nominal Security Auctions by Investor Class (6-Month Moving Average)



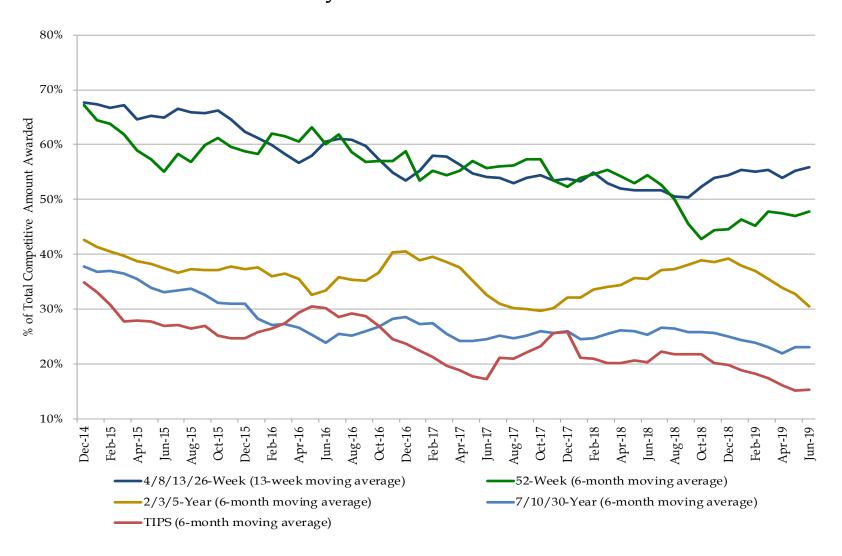
Percent Awarded in 7-, 10-, 30-Year Nominal Security Auctions by Investor Class (6-Month Moving Average)



Percent Awarded in TIPS Auctions by Investor Class (6-Month Moving Average)

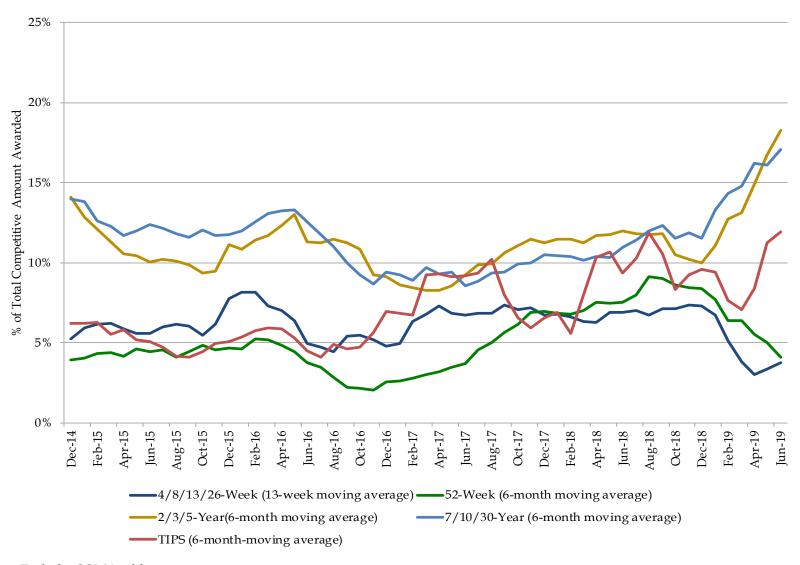


Primary Dealer Awards at Auction



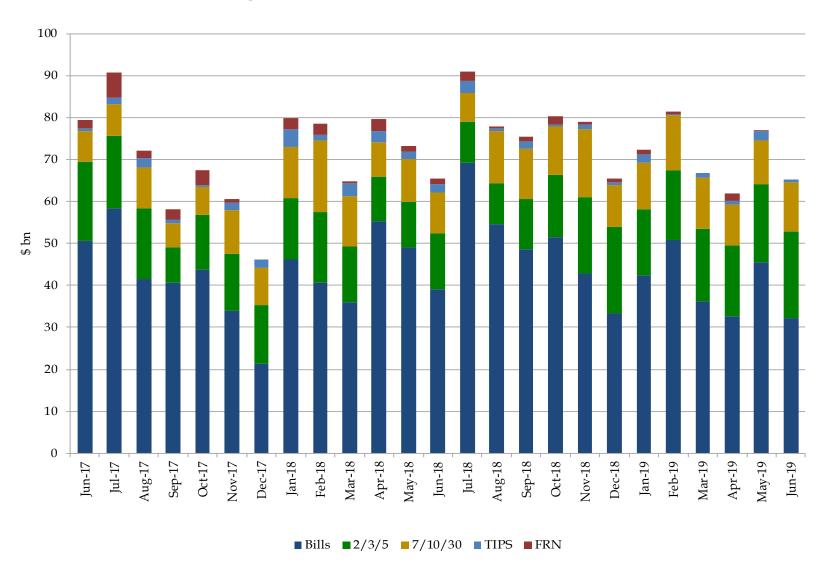
Excludes SOMA add-ons.

Direct Bidder Awards at Auction

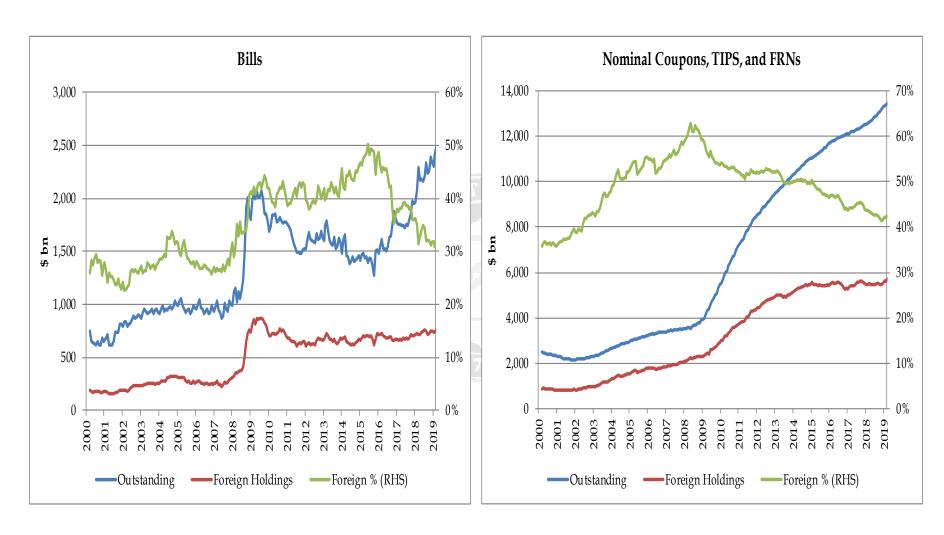


Excludes SOMA add-ons.

Total Foreign Awards of Treasuries at Auction, \$ billions



Total Foreign Holdings



Source: Treasury International Capital (TIC) System.

For more information on foreign participation data, including more details about the TIC data shown here, please refer to Treasury Presentation to TBAC "Brief Overview of Key Data Sources on Foreign Participation in the U.S. Treasury Securities Market" at the Treasury February 2019 Refunding.



Historical Net Marketable Borrowing and Projected Net Borrowing Assuming Future Issuance Remains Constant, \$ billions

Fiscal Year	Bills	2/3/5	7/10/30	TIPS	FRN	Historical/Projected Net Borrowing Capacity	OMB's FY 2020 Mid- Session Review	CBO's "An Analysis of the President's 2020 Budget "	Primary Dealer Survey
2014	(119)	(92)	669	88	123	669			
2015	(53)	(282)	641	88	164	558			
2016	289	(82)	477	64	47	795			
2017	155	9	292	55	9	519			
2018	438	209	316	51	26	1,040			
2019	11	517	256	50	55	889	1,070	871	775
2020	0	461	366	51	34	912	1,112	1,030	1,085
2021	0	318	268	25	0	611	1,082	1,082 978	
2022	0	117	374	16	(0)	507	1,030	1,121	
2023	0	142	262	17	5	426	894	1,060	
2024	0	77	242	29	(1)	347	703	940	
2025	0	(47)	313	(51)	(0)	216	659	993	
2026	0	(41)	294	(39)	(3)	211	598	997	
2027	0	4	243	(26)	(2)	219	542	1,077	
2028	0	(15)	247	(55)	3	181	551	1,219	
2029	0	(7)	205	(57)	0	141	266	1,068	

Net borrowing capacity reflects a reduction in SOMA's monthly Treasury redemption cap from \$30 billion to \$15 billion beginning in May 2019 and an end date for SOMA capped redemptions at the end of September 2019, according to the FOMC's "Balance Sheet Normalization Principles and Plans" published on March 20, 2019.

Treasury's latest primary dealer survey estimates can be found on page 11. OMB's projections of the change in debt held by the public are from Table S-11 of "A Budget for a Better America, Fiscal Year 2020, Mid-Session Review," July 2019. CBO's baseline budget projections of the change in debt held by the public are from Table 2 of CBO's "An Analysis of the President's 2020 Budget," May 2019.

Bills										
Issue	Settle Date	Stop Out Rate (%)*	Bid-to- Cover Ratio*	Competitive Awards (\$bn)	% Primary Dealer*	% Direct*	% Indirect*	Non- Competitive Awards (\$bn)	SOMA "Add Ons" (\$bn)	10-Year Equivalent (\$bn)**
4-Week	4/9/2019	2.390	2.96	48.6	51.8	2.8	45.5	1.4	0.0	0.4
4-Week	4/16/2019	2.375	2.88	48.6	51.8	2.5	45.7	1.4	0.0	0.4
4-Week	4/23/2019	2.400	2.61	48.4	53.0	1.9	45.1	1.6	0.0	0.4
4-Week	4/30/2019	2.390	2.72	48.4	56.2	1.8	42.0	1.6	0.0	0.4
4-Week	5/7/2019	2.390	2.70	48.5	56.1	3.3	40.7	1.5	0.0	0.4
4-Week	5/14/2019	2.385	2.83	48.4	56.8	2.5	40.8	1.6	0.0	0.4
4-Week	5/21/2019	2.365	2.85	48.0	56.0	0.8	43.2	2.0	0.0	0.4
4-Week	5/28/2019	2.335	2.53	43.5	64.7	1.7	33.6	1.5	0.0	0.4
4-Week	6/4/2019	2.330	3.02	38.5	64.1	4.0	31.9	1.5	0.0	0.3
4-Week	6/11/2019	2.290	2.75	38.5	52.7	2.7	44.6	1.5	0.0	0.3
4-Week	6/18/2019	2.215	2.88	38.5	65.3	3.4	31.3	1.5	0.0	0.3
4-Week	6/25/2019	2.140	2.86	38.6	60.8	3.0	36.2	1.4	0.0	0.3
4-Week	7/2/2019	2.145	2.74	38.6	66.6	4.1	29.3	1.4	0.0	0.3
8-Week	4/9/2019	2.380	3.35	34.8	54.7	3.2	42.1	0.2	0.0	0.6
8-Week	4/16/2019	2.375	2.99	34.8	66.2	3.2	30.6	0.2	0.0	0.6
8-Week	4/23/2019	2.390	2.95	34.7	61.1	2.5	36.4	0.3	0.0	0.6
8-Week	4/30/2019	2.380	3.29	34.6	56.1	2.5	41.4	0.4	0.0	0.6
8-Week	5/7/2019	2.390	2.70	34.8	66.9	3.6	29.6	0.2	0.0	0.6
8-Week	5/14/2019	2.380	3.05	34.7	58.3	2.7	39.0	0.3	0.0	0.6
8-Week	5/21/2019	2.355	3.10	34.8	57.0	0.9	42.1	0.2	0.0	0.6
8-Week	5/28/2019	2.330	2.53	34.7	80.3	2.4	17.3	0.3	0.0	0.6
8-Week	6/4/2019	2.330	2.74	34.8	73.1	2.5	24.4	0.2	0.0	0.6
8-Week	6/11/2019	2.300	2.73	34.7	64.4	8.7	26.9	0.3	0.0	0.6
8-Week	6/18/2019	2.200	3.12	34.7	45.9	1.8	52.3	0.3	0.0	0.6
8-Week	6/25/2019	2.105	2.98	34.7	48.5	3.3	48.2	0.3	0.0	0.6
8-Week	7/2/2019	2.120	3.17	34.7	42.0	2.9	55.1	0.3	0.0	0.6

 $[\]hbox{*Weighted averages of competitive awards.}$

^{**}Approximated using prices at settlement and includes both competitive and non-competitive awards.

Bills										
Issue	Settle Date	Stop Out Rate (%)*	Bid-to- Cover Ratio*	Competitive Awards (\$bn)	% Primary Dealer*	% Direct*	% Indirect*	Non- Competitive Awards (\$bn)	SOMA "Add Ons" (\$bn)	10-Year Equivalent (\$bn)**
13-Week	4/4/2019	2.380	2.68	43.9	60.9	3.5	35.6	1.1	0.0	1.3
13-Week	4/11/2019	2.375	3.07	40.7	55.7	4.1	40.1	1.3	0.0	1.2
13-Week	4/18/2019	2.380	2.81	40.7	55.4	2.7	41.9	1.3	0.0	1.2
13-Week	4/25/2019	2.400	2.91	40.8	52.9	3.4	43.7	1.2	0.0	1.2
13-Week	5/2/2019	2.385	3.08	37.8	47.1	3.6	49.4	1.2	0.0	1.1
13-Week	5/9/2019	2.380	3.17	37.8	49.7	6.0	44.4	1.2	0.0	1.1
13-Week	5/16/2019	2.360	3.52	37.8	42.4	3.8	53.8	1.2	0.0	1.1
13-Week	5/23/2019	2.335	2.94	34.9	57.3	3.4	39.3	1.1	0.0	1.0
13-Week	5/30/2019	2.310	3.15	34.8	51.0	3.9	45.1	1.2	0.0	1.0
13-Week	6/6/2019	2.300	2.59	35.0	62.2	3.8	34.0	1.0	0.0	1.0
13-Week	6/13/2019	2.240	3.21	34.7	41.6	6.8	51.6	1.3	0.0	1.0
13-Week	6/20/2019	2.170	2.84	34.8	59.4	3.1	37.5	1.2	0.0	1.0
13-Week	6/27/2019	2.085	3.00	34.7	42.3	4.4	53.3	1.3	0.0	1.0
26-Week	4/4/2019	2.380	2.92	37.8	53.9	11.8	34.3	1.2	0.0	2.2
26-Week	4/11/2019	2.395	3.14	34.8	61.3	9.2	29.5	1.2	0.0	2.1
26-Week	4/18/2019	2.390	3.09	34.8	61.8	3.3	34.9	1.2	0.0	2.1
26-Week	4/25/2019	2.400	3.26	34.9	37.0	6.6	56.5	1.1	0.0	2.1
26-Week	5/2/2019	2.395	3.01	34.8	55.6	2.9	41.6	1.2	0.0	2.1
26-Week	5/9/2019	2.380	3.21	35.0	39.4	8.3	52.3	1.0	0.0	2.1
26-Week	5/23/2019	2.340	2.82	34.9	59.3	5.1	35.6	1.1	0.0	2.0
26-Week	5/30/2019	2.320	2.91	35.0	53.4	4.7	41.9	1.0	0.0	2.0
26-Week	6/6/2019	2.255	2.70	35.0	58.7	2.2	39.1	1.0	0.0	2.0
26-Week	6/13/2019	2.140	2.98	35.0	55.3	6.1	38.6	1.0	0.0	2.0
26-Week	6/20/2019	2.130	2.88	35.1	49.4	1.7	48.9	0.9	0.0	2.0
26-Week	6/27/2019	2.030	2.69	35.1	63.6	2.2	34.1	0.9	0.0	2.0
52-Week	4/25/2019	2.360	3.44	25.4	33.7	1.9	64.4	0.6	0.0	3.0
52-Week	5/23/2019	2.280	2.95	25.4	48.6	3.3	48.1	0.6	0.0	2.9
52-Week	6/20/2019	1.985	2.88	25.5	53.0	1.6	45.3	0.5	0.0	2.9
CMB	5/7/2019	2.385	3.27	20.0	64.4	4.9	30.7	0.0	0.0	0.2

^{*}Weighted averages of competitive awards.

**Approximated using prices at settlement and includes both competitive and non-competitive awards.

Nominal Coupons										
Issue	Settle Date	Stop Out Rate (%)*	Bid-to- Cover Ratio*	Competitive Awards (\$bn)	% Primary Dealer*	% Direct*	% Indirect*	Non- Competitive Awards (\$bn)	SOMA "Add Ons" (\$bn)	10-Year Equivalent (\$bn)**
2-Year	4/30/2019	2.355	2.51	39.7	36.5	15.8	47.7	0.3	0.5	9.2
2-Year	5/31/2019	2.125	2.75	39.6	26.2	27.2	46.6	0.4	4.2	9.8
2-Year	7/1/2019	1.695	2.58	39.6	27.3	24.2	48.5	0.4	2.3	9.4
3-Year	4/15/2019	2.301	2.49	37.8	38.6	18.7	42.7	0.2	0.0	12.7
3-Year	5/15/2019	2.248	2.48	37.9	42.0	20.0	37.9	0.1	12.9	17.2
3-Year	6/17/2019	1.861	2.62	37.7	30.0	13.4	56.6	0.3	0.0	12.5
5-Year	4/30/2019	2.315	2.44	41.0	23.3	15.3	61.5	0.0	0.5	22.8
5-Year	5/31/2019	2.065	2.38	41.0	24.1	18.4	57.5	0.0	4.3	24.3
5-Year	7/1/2019	1.791	2.35	41.0	23.2	19.7	57.1	0.0	2.3	23.5
7-Year	4/30/2019	2.426	2.49	31.9	20.6	19.1	60.4	0.1	0.4	24.3
7-Year	5/31/2019	2.144	2.30	32.0	30.5	11.3	58.3	0.0	3.4	25.9
7-Year	7/1/2019	1.889	2.44	32.0	20.3	24.2	55.5	0.0	1.8	25.2
10-Year	4/15/2019	2.466	2.55	24.0	19.6	12.0	68.4	0.0	0.0	24.0
10-Year	5/15/2019	2.479	2.17	27.0	35.2	11.5	53.3	0.0	9.2	37.5
10-Year	6/17/2019	2.130	2.49	24.0	20.8	13.6	65.6	0.0	0.0	24.0
30-Year	4/15/2019	2.930	2.25	16.0	25.1	14.4	60.5	0.0	0.0	36.5
30-Year	5/15/2019	2.892	2.20	19.0	28.5	11.0	60.5	0.0	6.5	59.7
30-Year	6/17/2019	2.607	2.32	16.0	24.1	15.1	60.8	0.0	0.0	36.8
2-Year FRN	4/30/2019	0.139	2.68	20.0	60.2	1.3	38.5	0.0	0.3	0.0
2-Year FRN	5/31/2019	0.140	2.84	18.0	57.3	2.9	39.8	0.0	1.9	0.0
2-Year FRN	6/28/2019	0.210	3.36	18.0	31.5	0.3	68.2	0.0	0.0	0.0

TIPS											
Issue	Settle Date	Stop Out Rate (%)*	Bid-to- Cover Ratio*	Competitive Awards (\$bn)	% Primary Dealer*	% Direct*	% Indirect*	Non- Competitive Awards (\$bn)	SOMA "Add Ons" (\$bn)	10-Year Equivalent (\$bn)**	
5-Year TIPS	4/30/2019	0.515	2.50	16.9	15.8	8.8	75.4	0.1	0.2	9.8	
5-Year TIPS	6/28/2019	0.152	2.55	15.0	13.4	10.9	75.7	0.0	0.0	8.1	
10-Year TIPS	5/31/2019	0.567	3.07	11.0	13.9	29.1	57.0	0.0	1.2	12.7	

^{*}Weighted averages of competitive awards. FRNs are reported on discount margin basis.

^{**}Approximated using prices at settlement and includes both competitive and non-competitive awards. For TIPS' 10-Year equivalent, a constant auction BEI is used as the inflation assumption.